

**Abstract****ADDRESS MECHANISMS IN INTERNET PROTOCOL**

A method of verifying that a host coupled to an IP network is authorised to use an IP  
5 address which the host claims to own, the IP address comprising a routing prefix and an  
interface identifier part. The method comprises receiving from the host one or more  
components, applying a one-way coding function to the or each component and/or  
derivatives of the or each component, and comparing the result or a derivative of the  
result against the interface identifier part of the IP address. If the result or its derivative  
10 matches the interface identifier the host is assumed to be authorised to use the IP  
address and if the result or its derivative does not match the interface identifier the host  
is assumed not to be authorised to use the IP address.

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